

SOURCE SELECTION STATEMENT
FOR THE
CREW, ROBOTICS AND VEHICLE EQUIPMENT (CRAVE) CONTRACT
A-CRAVE-UNRESTRICTED
LYNDON B. JOHNSON SPACE CENTER

On December 8, 2004, I along with several officials from the Lyndon B. Johnson Space Center (JSC), met with members of the Source Evaluation Committee (SEC) appointed to evaluate proposals for the Crew, Robotics and Vehicle Equipment (CRAVE) procurement. The CRAVE contracts will provide design, development, testing, manufacturing, and evaluation and sustaining engineering necessary to certify, deliver and maintain Extravehicular Activity Equipment (EVA), Flight Crew Equipment (FCE), Crew Health and Conditioning Systems (CHeCS), Extravehicular Robotics EVR equipment, Environmental Control and Life Support (ECLS) equipment, and Active Thermal Control Systems (ATCS) equipment, including ground support equipment (GSE) in support of the Space Shuttle, the International Space Station (ISS), and advanced programs of Government-Furnished Equipment (GFE) for future human Space Flight programs. This effort includes the necessary labor, material, equipment, and facilities to accomplish the tasks required by this contract, including all necessary program, business management, engineering, technical and administrative skills necessary to accomplish the objectives and outcomes described within the contract.

The CRAVE procurement's stated goal is for multiple awards of Indefinite Delivery/Indefinite Quantity (IDIQ) contracts, and is being conducted using two separate solicitations. This solicitation, A-CRAVE, is for full and open competition. (The other CRAVE solicitation, NNJ04047146R, which contains the same requirements, is restricted to educational institutions, nonprofit institutions and Federally Funded Research and Development Centers (FFRDCs) that could potentially perform at least 51 percent of the CRAVE requirements for all Delivery Orders; it is known as "B-CRAVE-Restricted.") After the CRAVE contracts are awarded, organizations that were awarded contracts under A-CRAVE will compete for Delivery Order awards with those organizations that were awarded contracts under B-CRAVE. In awarding these Delivery Orders, no special consideration will be given based on the contractor's organization type or business classification. The CRAVE acquisition will be conducted as a multiple award IDIQ-type procurement, and authorization to perform work under the CRAVE contracts will be through the issuance of Cost Plus Fixed Fee (CPFF) and Firm Fixed Price (FFP) Delivery Orders. The CRAVE contracts will have a base period of 5 years with no options. Contract performance is scheduled to begin on January 7, 2005.

For both the A-CRAVE and B-CRAVE, the requirement for a Draft Request for Proposal (RFP) was waived by the JSC Procurement Officer on February 6, 2004, and no pre-proposal conference was conducted. On May 25, 2004, the final RFP was posted on the Internet. Volume III of the proposal was initially due on June 18, 2004, and this date was extended to July 2, 2004. The remainder of the proposal was initially due on June 30, 2004, and was extended to July 15, 2004. Five proposals were submitted to the Government on July 15, 2004, in response to the CRAVE solicitations, two under the A-CRAVE and three under the

B-CRAVE. In response to the A-CRAVE solicitation, timely proposals were received from the following firms:

Oceaneering Space Systems (Oceaneering)
Hamilton Sundstrand Management Services, Inc. (Hamilton)

Prior to the issuance of the RFP, the CRAVE SEC developed four Mission Suitability evaluation subfactors. The RFP described these subfactors and listed the relative importance and weighting of each as set forth below:

Technical Approach	500
Management Approach	300
Small Business/Small Disadvantaged Business Participation	100
Safety and Health Approach	100

In addition to Mission Suitability, the RFP identified, and the SEC evaluated, Cost and Past Performance. These were not numerically scored. The RFP also provided for a downward adjustment of offerors' Mission Suitability scores up to 300 points based on cost realism, which was defined as the difference between each offeror's proposed cost and the Government's evaluated probable cost for that proposal.

The RFP stated that the Factors of Mission Suitability and Past Performance, when combined, are significantly more important than Cost. As between each other, Mission Suitability is more important than Past Performance.

In descending order of Mission Suitability scores, the Board ranked the two A-CRAVE proposals as follows:

Oceaneering
Hamilton

The proposal of Oceaneering was rated as Very Good overall for Mission Suitability, with ratings of Excellent in Management Approach, Very Good in Safety and Health and Small and Small Disadvantaged Business Approach, and Good in Technical Approach. The SEC identified several significant strengths in the proposal and no significant weaknesses. There were also numerous strengths although these were counterbalanced by several weaknesses, including three weaknesses in Past Performance. Oceaneering's proposal was rated as Very Good in Past Performance.

Hamilton Sundstrand's proposal was rated lower, receiving a rating of Fair for Mission Suitability. One significant strength was noted, and Hamilton Sundstrand was rated Poor in Management Approach, Fair in Technical Approach, Very Good in Safety and Health Approach and Good in Small and Small Disadvantaged Business Approach. Overall, the proposal was characterized by one deficiency, two significant weaknesses in management approach, three significant weaknesses in technical approach and numerous weaknesses which were partially

offset by a smaller number of strengths. Hamilton Sundstrand was rated Good in Past Performance.

After a preliminary review of the proposals, the SEC initially determined that both of the A-CRAVE proposals were acceptable, and at the completion of the initial evaluation, the Contracting Officer determined that both the proposals of Oceaneering and Hamilton Sundstrand were in the competitive range. Following a briefing by the Committee, I approved the competitive range determination on September 10, 2004. The offerors were notified of these results by letter on September 15, 2004. Although the RFP stated that the SEC was authorized to make award(s) without discussions, evaluations of the Offeror's proposals resulted in the SEC's decision to hold discussions with the Offerors. Letters were sent to each of the Offerors, and transmitted to them their proposal deficiency, weaknesses, clarifications and cost questions identified during the SEC's initial evaluation, along with a scheduled date and agenda for discussions. Discussions focused on disclosing all weaknesses and ensuring the Government fully understood the specifics of each proposal and that each Offeror understood the specifics of the RFP. Discussions began on October 15, 2004, and concluded on November 5, 2004.

Requests for Final Proposal letters were provided to the Offerors on October 27, 2004, and Final Proposal revisions were received on November 8, 2004. The SEC completed its evaluation of the Offeror's final proposal revisions on November 17, 2004. For Oceaneering, the final evaluation determined that two weaknesses, within Past Performance, remained and that all other weaknesses (16) were eliminated. One additional significant strength was added during the final evaluation. The final overall Mission Suitability rating for Oceaneering Space Systems was Excellent.

For Hamilton, the final evaluation determined that the one deficiency had been eliminated, that three significant weaknesses had been eliminated, that three other significant weaknesses had been partially addressed and downgraded to weaknesses, and that six weaknesses remained. No additional strengths were added during the final evaluation. The final overall Mission Suitability rating for Hamilton Sundstrand was Good.

Following final proposal evaluation, it was clear from the Committee's findings that either Oceaneering or Hamilton could be expected to perform the required services. No reservations were expressed regarding the ability of either of the A-CRAVE offerors to perform the work, nor were any significant risks identified by the Committee regarding either of these offerors.

After hearing the Committee's presentation on December 8, 2004, I carefully reviewed the specific strengths and weaknesses of both Oceaneering's and Hamilton's proposals. After examining the findings of the Committee in the context of the solicitation's stated goal, that multiple IDIQ contract awards were anticipated, and that all Delivery Orders were to be competed among contract recipients, with a minimum specified guaranteed work value amount of \$15,000, I determined that each of the A-CRAVE competitors offered significant value in their proposals.

The following represents my analysis of the value to the Government provided by the two A-CRAVE proposals. I first focused on the Mission Suitability subfactors having the greatest

weight: Management Approach and Technical Performance. In my review, I considered the relative value of all the findings to the Government.

MISSION SUITABILITY

Subfactors: Management and Technical Approach

By proposing highly effective management strategies, Oceaneering's proposal demonstrates that they consider their employees to be their most valued asset, and I found significant value in the fact that their employees are interested in working and remaining with their company since they have the opportunity to develop new products from beginning to end in a turn-key product environment. The obvious benefit to the Government is that Oceaneering's commitment to its employees and its approach to employee development increases the likelihood that it will attain and retain personnel to work on Delivery Order requirements from beginning to end, providing continuity and a consistent technical approach. I also found significant value in Oceaneering's proposed approach to subcontract management. Oceaneering has assembled a broad based team of companies to support the CRAVE effort. This proactive coordination demonstrates their capability to anticipate and plan for successful delivery of products to the Government and provides the Government with the full scope of capabilities required to accomplish the CRAVE Statement of Work while also providing surge and reach back capability when required.

By proposing early identification of risks and addressing multiple sources of risks, Oceaneering identified a highly effective risk management approach. The Delivery Order proposal team assessed multiple sources of risk during Delivery Order proposal preparation which offers significant value to the Government in being able to incorporate the results of the initial risk assessment into Delivery Order execution. I found that Oceaneering also demonstrated a clear understanding of the management of advanced technology work. I also found significant value in Oceaneering's proposed approach of implementing an electronic data capture and management system that ties the data product life cycle to schedule and provides automatic status updates as the data product is electronically signed for approval. Such a system will provide value to the Government through enhanced hardware processing and increased productivity.

Oceaneering also indicated that it occupied two facilities near the Johnson Space Center. Use of these facilities in performing the Delivery Orders offers significant value to the Government. I also found that Oceaneering's past utilization of NASA test facilities on Extravehicular Activity, Robots and flight projects offers significant value to the Government in that documentation required by Test Facility Managers is well understood and that existing relationships with NASA and vendor test facilities will help assure that CRAVE schedules are met.

Under the subfactors of Management and Technical Approach, Hamilton likewise proposed an effective approach for attracting and retaining personnel, focusing on employee satisfaction, a continuous improvement culture and a world-class educational assistance program which offers value to the Government through the likelihood of retaining personnel to work the Delivery Orders from beginning to end. Hamilton also addressed risk assessment over and above expectations, providing value by demonstrating an understanding of the emphasis that NASA

places on risk management tools. I further found that Hamilton also demonstrated a good understanding of the management of advanced technology work. I found value to the Government in Hamilton's proposed use of an existing high speed information systems connectivity between itself and NASA, allowing its information systems to connect seamlessly with NASA's information systems. I found value to the Government in Hamilton's knowledge of hardware sustaining engineering support to the Shuttle Program. Hamilton's proposal further presented innovative options for quick turnaround completion of a flight sensor in Technical Work Package IV, which provides value to the Government through their ability to provide creative and innovative solutions for quick delivery of products to the Government. Hamilton's response to Technical Work Package III showed a complete understanding of system level interactions, detailed component risks and the requirements of the Technical Work Package. Hamilton's complete and detailed understanding of these technical issues offers value to the Government and increases the likelihood of successful completion of CRAVE requirements for similar development efforts. Hamilton also indicated that its in-house facility has a variety of equipment necessary for working with a variety of materials which will be of significant value to the Government.

Subfactor: Safety and Health Approach

In the subfactor of Safety and Health Approach, I examined the significant strengths assigned by the SEC to Oceaneering and Hamilton for safety and health programs that exceed the minimum requirements for CRAVE. Both Oceaneering's and Hamilton's management leadership and employee involvement in their safety and health programs offer significant value to the Government by improving the likelihood reduced Government involvement and oversight.

Subfactor: Small Business/Small Disadvantaged Business Participation

In the subfactor of Small Business/Small Disadvantaged Business Participation, I examined the significant strength assigned by the SEC to Oceaneering based upon its proposed utilization of an extensive supplier base including small businesses that will make up their team for the A-CRAVE contract, and Hamilton's strength demonstrating commitment to exceeding Small Business Goals. Both offerors demonstrate commitment to exceeding the A-CRAVE Small Business requirements, which provide significant value to the Government by meeting the Small Business goals and by increasing the likelihood of retaining and obtaining new qualified small and Small Disadvantaged Businesses.

PAST PERFORMANCE


In the factor of Past Performance, I found significant value in both Oceaneering's and Hamilton's experiences in developing products in CRAVE technical areas, thereby increasing the likelihood of successful delivery of CRAVE requirements in all technical areas. Past performance data received from Oceaneering's customers verified this experience, as well as successful past performance on several contracts for similar effort. Hamilton also demonstrated effective safety and environmental performance for lowering risk and maintaining cost and schedule goals for the Government. Hamilton is also recognized as a "STAR of Excellence" site in the Occupational, Safety and Health Administration's (OSHA) Voluntary Protection Program.

I also found significant value to the Government in Oceaneering's demonstration of understanding of NASA processes and required documentation for certification and acceptance of flight hardware, and in Hamilton's company history of no OSHA or environmental citations. I further found value in Oceaneering's demonstration of their understanding of the unique requirements imposed by the extravehicular orbital environment and the methods necessary to verify that equipment will operate as designated in those environments and in Hamilton's company history which shows its attention to detail in delivering products that met or exceeded customer requirements for cost and schedule. Oceaneering Space Systems' Final Past Performance Rating was Very Good. Hamilton Sundstrand's Final Past Performance Rating was also Very Good.

COST

As stated above the factors of Mission Suitability and Past Performance, when combined, are significantly more important than Cost. The SEC evaluated all cost proposals consistently. Individualized working models were created for each offeror and validated as functional and separate files. The internal models used Government pre-established hours that were multiplied against the offerors proposed loaded direct labor rates. The resulting cost was considered the proposed cost for both the cost reimbursement and firm fixed price. The SEC did not adjust Oceaneering's or Hamilton's Final Proposal Revision, and all cost elements were determined to be acceptable as proposed on the SEC's cost realism analysis which included the results of the audit data received from DCAA. The SEC also accepted Oceaneering's and Hamilton's proposed fee rates. No adjustment to their Mission Suitability scores was necessary. I considered that the resources proposed for both Oceaneering's and Hamilton's approach for implementing the A-CRAVE effort (both labor and non-labor) were realistic for meeting the contract requirements. All offerors have unique technical and management approaches which are reflected in their proposed prices. All competitors offer value when prices are compared against strengths and weaknesses, and although price differences exist, the offerors' rates are realistic based on cost realism and price analysis.

In conclusion, based upon my analysis of all strengths for both offerors as discussed above, I determine that both companies offer value to the Government, and that based on the ability to award to multiple offerors as stated in the solicitation and the value that each offeror includes in its proposal, it is my decision to award a contract to Oceaneering Space System and to Hamilton Sundstrand. In this procurement, an award to each would meet the goals of the solicitation and would be in the best interest of the Government.


Debra L. Johnson
Source Selection Authority

12/17/04